

ABSTRACT

The object of the present invention is to provide a powder core and method for making the same that is equipped with insulative coating having
5 superior heat resistance, with the coating making it possible to adequately restrict the flow of eddy currents between particles.

The powder core is equipped with a plurality of compound magnetic particles bonded to each other. Each of said plurality of composite magnetic particles includes: a metal magnetic particle 10; an insulative lower layer 20
10 coating surrounding a surface 10a of said metal magnetic particle 10; an upper layer coating 30 surrounding said lower layer coating 20 and containing silicon; and dispersed particles 50 containing a metal oxide compound and disposed in said lower layer coating 20 and/or said upper layer coating 30. A mean particle diameter R of the dispersed particles 50 meets the condition 10
15 $nm < R \leq 2T$, where the average thickness of the coating combining the lower layer coating 20 and the upper layer coating 30 is T.